

# Blood cancers-Complications of Disease and Treatment

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The Royal Marsden

## Aims:

- Assessing and managing complications during therapy
- Monitoring for relapse
- Screening for treatment and disease associated longer term complications



# Assessing and managing complications during therapy





*"Remember, do a nursing assessment. He's on chemo"*



# The ROYAL MARSDEN

## Triage log sheet

# Assessment tool for triaging telephone contact

Patient details / Patient history / Enquiry details						
Name		Hospital no.		Date of birth		
Diagnosis			Consultant			
Who is calling?		Contact no.		Date and time of call / / : :		
Reason for call (in patients / carer's own words)						
Current treatment?		Chemotherapy <input type="checkbox"/>	Radiotherapy <input type="checkbox"/>	Surgery <input type="checkbox"/>	Other <input type="checkbox"/>	None <input type="checkbox"/>
Is the patient on a research trial?		YES <input type="checkbox"/>	NO <input type="checkbox"/>	Name/no. of trial		
Details of anti-cancer treatment				Any indwelling catheters and/or drains? YES <input type="checkbox"/> NO <input type="checkbox"/>		
				Current medication reviewed? YES <input type="checkbox"/> NO <input type="checkbox"/>		
<b>Fever</b>		<b>Gastrointestinal</b>		<b>Genitourinary</b>		
Fever > 37.5c (if receiving chemo)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Infection		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Cardiac</b>		<b>Oral//stomatitis</b>		<b>Neurological</b>		
CVS: Chest Pain		<input type="checkbox"/>	<input type="checkbox"/>	NEURO: Neurosensory /motor deficit		
<b>Respiratory</b>		Constipation		Pain		
RESP: Dyspnoea/shortness of breath		<input type="checkbox"/>	<input type="checkbox"/>	<b>Vascular</b>		
Cough		<input type="checkbox"/>	<input type="checkbox"/>	Bruising/bleeding		
		<input type="checkbox"/>	<input type="checkbox"/>	<b>Skin</b>		
Dysphasia		<input type="checkbox"/>	<input type="checkbox"/>	SKIN: rash		
<b>Other (please state)</b>				Extravasation/ phlebitis/ cellulitis		
				Haematoma/swelling/wound breakdown		
<b>Remember: two ambers equal red</b>						
<b>Action Taken</b>		Advise <input type="checkbox"/>		Follow up review <input type="checkbox"/>		
				Assess immediately <input type="checkbox"/>		
<b>Follow up action taken</b>						
Consultants team contacted?		YES <input type="checkbox"/>	N/A <input type="checkbox"/>	Date / /		
Signature			Print name			
Designation			Date / /			



### Royal Marsden Patient Assessment Telephone Triage Tool

Symptoms / Toxicity	Grade 0	Grade 1	Grade 2	Grade 3	Grade 4
<b>FEVER</b>					
Fever and receiving cytotoxic chemotherapy or immunocompromised Fever? Signs of infection? CVAD?	If temp 37.5 C OR ABOVE or BELOW 36C or GENERALLY UNWELL – URGENT Assessment AND MEDICAL REVIEW – Follow neutropenia pathway ALERT – Pts on steroids/analgesics or dehydrated may not present with pyrexia but may still have infection (if in doubt do a count)				
Infection Temperature? Source? Shivering, chills or shaking episodes? CVAD? Post treatment? Indwelling catheter / drains?	None	Generally well	Generally unwell	Severe symptomatic infection	Life threatening sepsis
<b>CARDIAC</b>					
Chest Pain Onset? What makes it worse? Duration? Radiation? Severity? Any cardiac history STOP CAPECITABINE or INFUSIONAL 5FU	None	Advise URGENT A&E for medical assessment			
<b>RESPIRATORY</b>					
Dyspnoea/shortness of breath Sudden onset? Is it a new symptom? Is dyspnoea worsening rest / exertion? Is there any chest pain Duration? Home oxygen? Tracheostomy? What can the patient do? (? Alteration in PS) CONSIDER SVCO / ANAEMIA / FE	None	No new symptoms	Dyspnoea on exertion	<ul style="list-style-type: none"> <li>Dyspnoea at normal level of activity</li> <li>Dyspnoea at rest or requiring ventilatory support</li> </ul>	
Cough Productive? Dry? Colour? Haemoptysis? Amount?	None	Not troublesome	Dry, apyrexia	Productive and pyrexia Haemoptysis	
<b>GASTROINTESTINAL</b>					
Nausea Duration? What is the patient's oral intake? Is the patient taking anti emetics as prescribed? Assess patient's urinary output.	None	Able to eat/drink reasonable intake Review anti emetics	Can eat/drink but intake significantly decreased Review anti emetics according to Trust policy	No significant intake	
Vomiting How many episodes / day? How many days? Constipation or diarrhoea? (see specific toxicity) Assess patient's urinary output & oral intake.	None	1 episode in 24 hours Review anti emetics	2-5 episodes in 24 hours Review anti emetics according to Trust policy	=6 episodes in 24 hours	
Oral / stomatitis Duration? Mouth ulcers? Evidence of infection? Assess patient's urinary output & oral intake.	None	Painless ulcers, erythema, mild soreness able to eat/drink Use mouthwash as recommended	Painful erythema, oedema or ulcers but can eat/drink Continue to use mouthwash, drink plenty of fluids. Analgesia	Painful erythema dimouty with eating and drinking	Mucosal necrosis and/or requires parenteral or enteral support
Diarrhoea Consider infection! Duration? How many days has this occurred for? How many times in a 24hr period? Does the patient have any abdominal pain/discomfort? For how long? Has the patient taken any medication? See specific toxicity for pain	None	Increase to 2-3 bowel movements a day over pre-treatment movements Drink more fluids Obtain stool sample ? consider regimen specific anti diarrhoeal	Increase 4-6 episodes a day or nocturnal movement/moderate cramping Drink plenty of fluids Obtain stool sample ? consider regimen specific anti diarrhoeal	Increase to 7-9 episodes a day or incontinence Severe cramping	Increase to >10 episodes a day or grossly bloody diarrhoea or need for parenteral support
Constipation How long since bowels opened? Passing flatus? Regular pattern? Any abdominal pain / distension / vomiting? Medication review? Laxatives / Analgesia?	None	Mild – no bowel movement in last 24 hours Dietary advice, increase fluid intake, review supportive medication	Moderate – no bowel movement in last 48 hours if associated with pain/vomiting move to 1st	Severe – no bowel movement in last 72 hours	
Anorexia Previous weight? Appetite? Feeding tubes? Any contributory factors e.g. dehydration, diarrhoea, vomiting, mucositis and nausea? – link to specific toxicity	None	Loss of appetite without alteration in eating habits Dietary advice	Oral intake altered without significant weight loss or malnutrition	<ul style="list-style-type: none"> <li>Oral intake altered in association with significant weight loss/malnutrition</li> <li>Life threatening complications e.g. colapse</li> </ul>	
Abdominal Distension / Bloating Bowel obstruction? Ascites? Constipation? Anorexia? - (see specific toxicity)	None	No other symptoms Not troublesome	Symptomatic but not interfering with GI or resp fn.	<ul style="list-style-type: none"> <li>Symptomatic and severely altered GI / resp fn.</li> <li>Life threatening consequences, eg operative intervention</li> </ul>	
Dysphagia Duration? Assess patient's urinary output & oral intake.	None	Symptomatic. Able to eat regular diet	Symptomatic. Altered eating. Reduced fluid intake.	Symptomatic and unable to eat diet and fluids.	
<b>GENITOURINARY</b>					
Urinary retention / symptoms Frequency / Amount / Colour / Odour / Pain Indwelling catheter In-situ? Urostomy? When was the last time the patient passed urine?	None	Hesitancy and dribbling	Dysuria Cloudy & odourless urine	Unable to pass urine Frank haematuria	
Bleeding New problem? Duration? Amount? Colour? Location? Is the patient on anticoagulants?	None	Mild, self limited controlled by conservative measures	1-2 units	3 – 4 units per episode	Massive >4 units per episode
<b>NEUROLOGICAL</b>					
Neurosensory / motor Timing / duration? Is it getting worse? Impact on mobility / function / cognitive? Constipation / urinary incontinence? Confusion? Visual Disturbances? Consider Spinal Cord Compression / hypercalcaemia / hypomagnesa	None	Mild paraesthesia, subjective weakness, no objective findings Monitor and contact immediately if deteriorates	Mild cognitive impairment Mild or moderate sensory loss, moderate paraesthesia, mild weakness with no loss of function.  New back pain in those with known spinal mets	<ul style="list-style-type: none"> <li>Severe cognitive impairment</li> <li>Severe sensory loss, paraesthesia or weakness that interferes with function</li> <li>Paralysis</li> </ul>	
Pain Duration? Severity? Location? Medication review? Consider thrombosis. Tany swelling/redness?	None	Mild pain Not interfering with function Advise/discuss analgesia	Has pain Pain or analgesia interfering with function, but not ADL	<ul style="list-style-type: none"> <li>Severe pain</li> <li>Pain or Analgesia interfering with ADL</li> <li>Severe pain, disabling!</li> </ul>	
<b>SKIN</b>					
Rash/PE Localised or generalised? Duration? Itchy? Any signs of the infection?	None	Macular or papular eruption or erythema without associated symptoms Localised rash, otherwise well	Macular or papular eruption or erythema with pruritis or associated symptoms	Systemically unwell	
Extravasation / Phlebitis / Cellulitis Problems Immediately after administration? When did the problem start? Location? CVAD? Explain the reaction	None	Mild, localised. No associated pain – to contact if worsens	Non vesicant Review next day	Vesicant – seek medical attention	
Haematoma / Swelling / Wound breakdown / Bruising ? redness / swelling / location / onset / post surgery Medication review Consider VTE	None	Mild swelling / redness Localised, otherwise well – to contact if worsens	Moderate pain, swelling, redness, wound breakdown (consider possible VTE)	<ul style="list-style-type: none"> <li>Severe breakdown / wound de-hissed</li> <li>Severe pain</li> <li>Severe swelling</li> </ul>	



# Assessing patients

- Clinical Assessment Unit
- Bud Flanagan Out Patients
- Review in Out Patients clinic
- Admit Direct to the Ward
- Local A&E/AOS service



*The* **ROYAL MARSDEN**  
Life demands excellence

Suspected neutropenic sepsis should be immediately managed in A&E according to local policy

**Patient Details**

Name:

DOB:

RMH consultant:

RMH No:

**Current treatment summary**

Oncology diagnosis:

Recent chemotherapy regimen & dates:

Other significant co-morbidity:

**Current presentation & recommendations**

Please find appended; triage log sheet, relevant recent clinic letters, recent blood and scan results

For further advice on management please contact:

Out of hours:

via RMH switchboard – 0208 642 6011

Working hours contact for the RMH team:

RMH ext no. \_\_\_\_\_



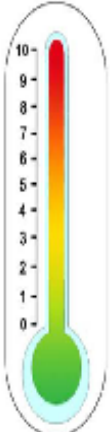
**THIS FAX CONTAINS CONFIDENTIAL PATIENT INFORMATION FOR THE  
URGENT ATTENTION OF THE CLINICAL TEAM**





### London Holistic Needs Assessment

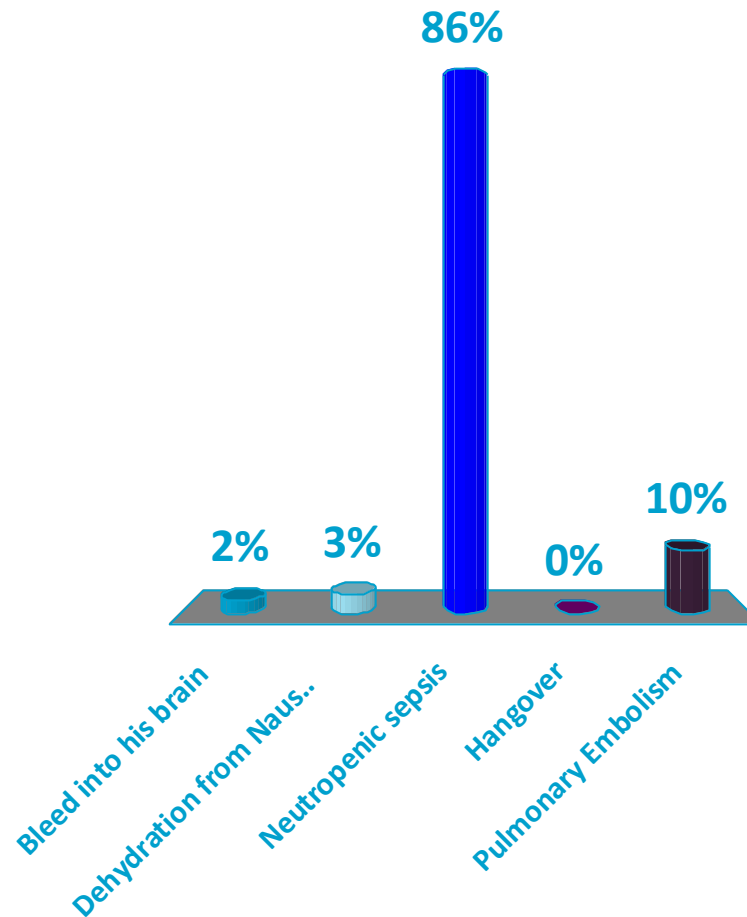
For each item below, please tick yes or no if they have been a concern for you during the last week, including today. Please also tick discuss if you wish to speak about it with your health professional.  
 Choose not to complete the assessment today by ticking this box

Date:		<input type="checkbox"/>		<b>Practical concerns</b>			<b>Yes</b>	<b>No</b>	<b>Discuss</b>	<b>Physical concerns</b>			<b>Yes</b>	<b>No</b>	<b>Discuss</b>	
Name:		<input type="checkbox"/>		Caring responsibilities			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	High temperature			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hospital/NHS number:		<input type="checkbox"/>		Housing or finances			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Wound care			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Please tick the number that best describes the overall level of distress you have been feeling during the last week, including today:  10 <input type="checkbox"/> <b>Extreme distress</b> 9 <input type="checkbox"/> 8 <input type="checkbox"/> 7 <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> 0 <input type="checkbox"/> <b>No distress</b> 		Transport or parking			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Passing urine			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
		Work or education			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Constipation or diarrhoea			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
		Information needs			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Indigestion			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
		Difficulty making plans			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Nausea and/or vomiting			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
		Grocery shopping			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Cough			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
		Preparing food			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Changes in weight			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
		Bathing or dressing			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Eating or appetite			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
		Laundry or housework			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Changes in taste			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
		<b>Family concerns</b>						Sore or dry mouth			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
		Relationship with children			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Feeling swollen			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Relationship with partner			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Breathlessness			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
Relationship with others			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pain			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
<b>Emotional concerns</b>						Dry, itchy or sore skin			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
Loneliness or isolation			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Tingling in hands or feet			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
Sadness or depression			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hot flushes			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
Worry, fear or anxiety			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Moving around or walking			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
Anger, frustration or guilt			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fatigue			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
Memory or concentration			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sleep problems			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
Hopelessness			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Communication			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
Sexual concerns			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Personal appearance			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
Other medical condition			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
<b>For health professional use</b>		<b>Spiritual concerns</b>														
Date of diagnosis:		Regret about the past			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Diagnosis:		Loss of faith or other spiritual concern			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Pathway point:		Loss of meaning or purpose in life			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			

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38 year old man High Grade NHL. On weekly chemotherapy. Reported coryzal symptoms, away on business, found collapsed in hotel room by secretary. What is the cause of collapse?

- A. Bleed into his brain
- B. Dehydration from Nausea and Vomiting
- C. Neutropenic sepsis
- D. Hangover
- E. Pulmonary Embolism



# 81 year old lady with CLL. On Ibrutinib. Calls with fever of 38.3.

- Husband has Alzheimers and she is the main carer
- Does not want to attend A&E and leave her husband
- Seen in clinic two days before HB 88, WBC 284, Platelets 238
- What would you recommend?



# Longer term monitoring for infection

- Monoclonal antibodies maintenance therapy
- Ibrutinib
- Lowered Immunity from treatment and disease (lymphopenia, Low IgG, CLL)
- Increased risk of viral infections
- Immunisation



# Immunisation Recommendations

- No randomised studies
- Antibody response rates to vaccines are lower in CLL than in healthy controls - better early in the disease and pre-immunosuppressive therapy
- Do not give live vaccines- polio, h zoster, yellow fever
- Avoid 2 weeks prior to, during or up to 2 months after chemo-immunotherapy
- Vaccination recommended against
  - pneumococcus and HIB
  - annual influenza and novel strains (swine flu)



# Monitoring for relapse



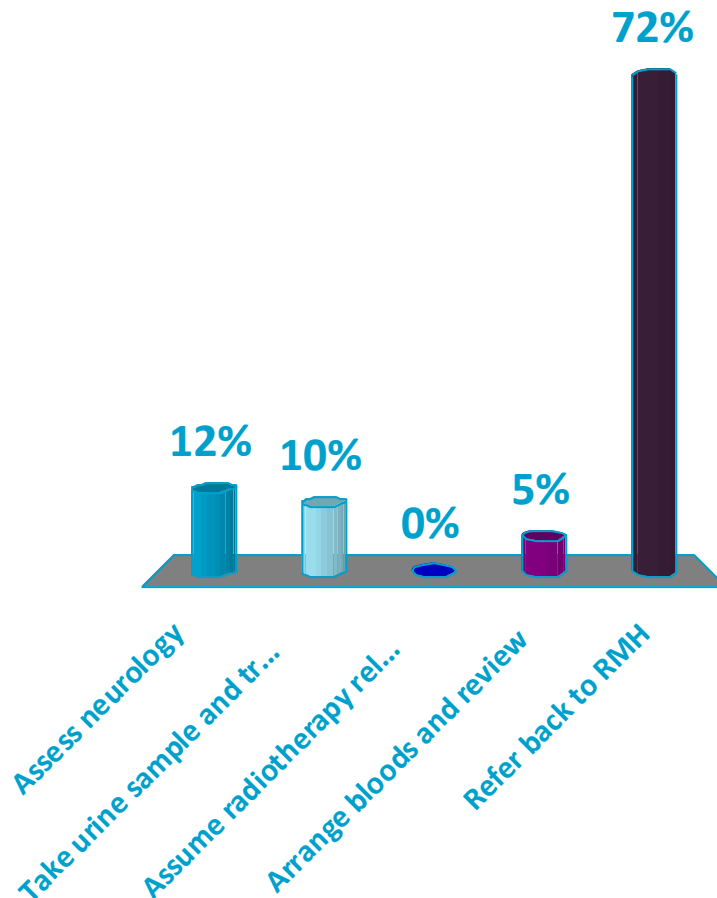
# Monitoring for relapse

- Studies show more than 80% of relapse will be detected by the patient not on routine follow-up
- New persistent nodes
- B-symptoms
- Signs of oncological emergency (SVCO, Cord compression, pathological fractures)
- Blood anomalies-FBC, LDH, Paraproteins, Hypercalcaemia, Raised LFT's, Hyperuricaemia
- Embolism
- Neurological symptoms



Mrs S, 72. Primary CNS NHL of cauda equina. Received 4 cycles HD MTX to MCR on PET scan. Completed IFRT to original mass 2 weeks before. Is paraplegic and has urinary catheter in situ. Husband reports increasing confusion and fatigue. What would you do?

- A. Assess neurology
- B. Take urine sample and treat as UTI
- C. Assume radiotherapy related and monitor
- D. Arrange bloods and review
- E. Refer back to RMH





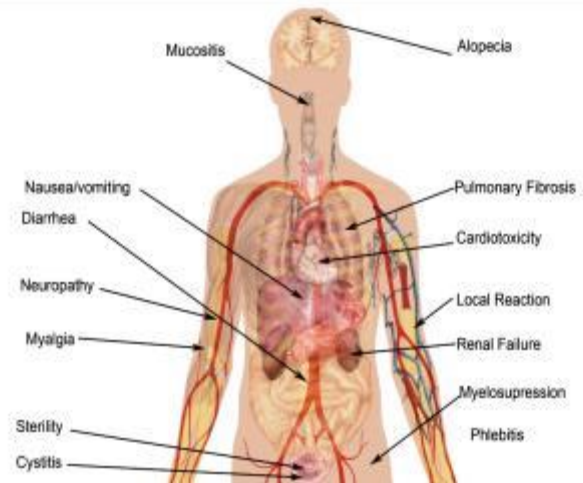
# Screening for treatment and disease associated longer term complications



# Late effects of treatment and follow-up

– Treatment dependent

– Age dependent



Inside every old person is a young person wondering what happened

- Terry Pratchett, from the book Moving Pictures



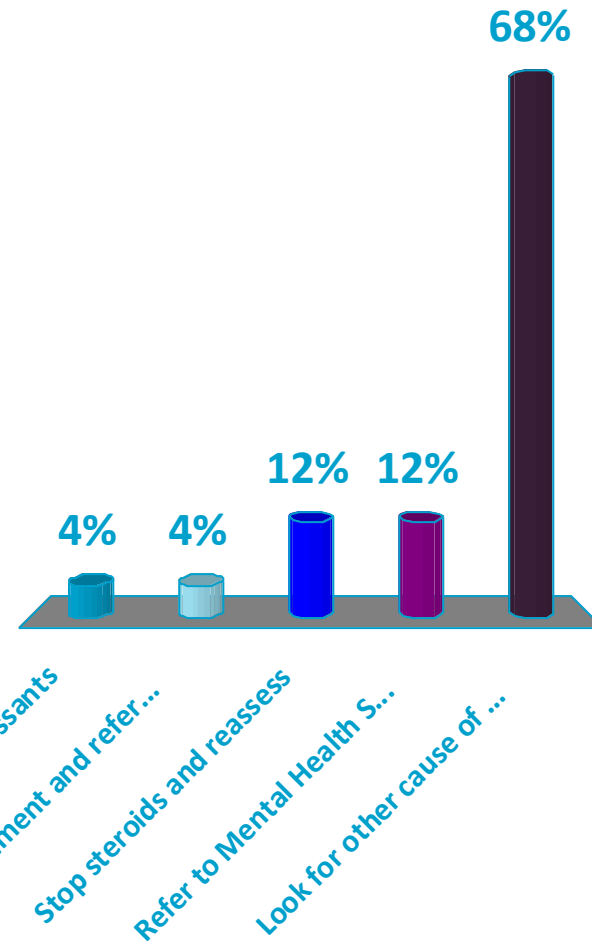
# Physical

- Cardiac
- Respiratory
- Urological
- Immune deficiency (Irradiated blood products)
- Pancytopenia
- Endocrine
- Thyroid function
- Second malignancy
- GI symptoms



Mr D, 82 yrs old. Prior PS 0. R Orchiectomy for DLBC NHL. On 4th cycle R-GCVP. Previous h/o nervous breakdown. Call from family that he is depressed, refusing to get up, does not want further therapy and just wants to die. Increasing night sweats and lethargy. What would you do?

- A. Commence anti-depressants
- B. Stop treatment and refer to palliative care
- C. Stop steroids and reassess
- D. Refer to Mental Health Service
- E. Look for other cause of change in mental state and symptoms



# Psychological/social

- Fear of recurrence
- Altered body image
- Endocrine related issues
- Social/financial issues
- Infertility

